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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/728,144

12/04/2003

Gert Koest

BTK Case 379

6805

23474 7590 04/06/2007
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EXAMINER

THOMAS, BRANDI N

ART UNIT

PAPER NUMBER

2873

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

04/06/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/728,144

Applicant(s)

KOEST, GERT

Examiner

Brandi N. Thomas

Art Unit

2873

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 19-22 is/are allowed.
- 6) ☒ Claim(s) 1-10, 12, 13 and 16-18 is/are rejected.
- 7) ☒ Claim(s) 11, 14 and 15 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 December 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 12/4/03; 5/6/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☒ Other: Detailed Action.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

2. Acknowledgement is made of receipt of Information Disclosure Statement(s) (PTO-1449) filed 12/4/03 and 5/6/04. An initialed copy is attached to this Office Action.

Drawings

3. The drawings are objected to because figures 1-8 show hand written text. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-10, 12, 13, and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hanemann et al. ((EP 38525 A1) in view of Snook (6193371).

Regarding claim 1, Hanemann et al. discloses, in figures 1 and 2, an ophthalmic refractometer (figure 1) for objective determination of the refractive power of an eye (3), comprising an optometer system (25) for imaging a test mark (2) on the retina of the eye (3) (page 3, lines 19-21) and comprising an observation system (24) for observation of the test mark (2) imaged on the retina (2'') (page 3, lines 21-22), whereby the optometer system (25) and the observation system (24) can be adjusted in mutual synchronization in relation to a reference position (page 3, lines 25-29), and whereby a refractive power parameter of the eye (3) can be determined from the difference between the reference setting and the setting at which the test mark (2) is imaged on the retina (2'') with at least some sharp contours (page 4, lines 1-8) but does not specifically disclose a digital recording device and a digital processing unit are provided on the observation system, whereby digital image data of the test mark imaged on the retina can be recorded with the recording device and the image data thus obtained can be analyzed in the image processing unit by digital image processing to determine the refractive power parameter. Snook discloses, in figure 8, a digital recording device (4) and a digital processing unit

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(computer) are provided on the observation system, whereby digital image data of the test mark imaged on the retina (1) can be recorded with the recording device (4) and the image data thus obtained can be analyzed in the image processing unit (computer) by digital image processing to determine the refractive power parameter (col. 8, lines 15-16 and 27-33). Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the device of Hanemann et al. with the digital recorder of Snook for the purpose of recording the image to further investigate the area of the eye (col. 8, lines 15-16 and 27-33).

Regarding claim 2, Hanemann et al. discloses, in figures 1 and 2, an ophthalmic refractometer (figure 1) for objective determination of the refractive power of an eye (3) but does not specifically disclose that the digital recording device is designed in the manner of a CCD chip. Snook discloses, in figure 8, characterized in that the digital recording device (4) is designed in the manner of a CCD chip (col. 8, lines 15-16 and 27-33). Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the device of Hanemann et al. with the digital recorder of Snook for the purpose of recording the image to further investigate the area of the eye (col. 8, lines 15-16 and 27-33).

Regarding claim 3, Hanemann et al. discloses, in figures 1 and 2, an ophthalmic refractometer (figure 1) for objective determination of the refractive power of an eye (3), characterized in that a linearly adjustable adjusting unit (6) is provided for synchronous adjustment of the optometer system (25) and the observation system (24), a first deflecting element (21) which is situated in the beam path of the optometer system (25) and a second deflector element (23) which is situated in the beam path of the observation system (24) being mounted thereon (page 3, lines 24-29), so that by adjusting the adjusting unit (6), the length of

the beam path in the optometer system (25) and the length of the beam path in the observation system (24) are varied in mutual synchronization (page 4, lines 9-22).

Regarding claim 4, Hanemann et al. discloses, in figures 1 and 2, an ophthalmic refractometer (figure 1) for objective determination of the refractive power of an eye (3), characterized in that the first deflecting element (21) and/or the second deflecting element (23) each have two reflective elements (22, 24, 25, and 26) which are arranged in the beam path of the optometer system (25) and/or in the beam path of the observation system (24) (page 3, lines 19-29), so that a path is formed resembling a trombone slide, suitable for varying the length of the beam path in the optometer system (25) and/or the length of the beam path in the observation system (24) (figure 2).

Regarding claim 5, Hanemann et al. discloses, in figures 1 and 2, an ophthalmic refractometer (figure 1) for objective determination of the refractive power of an eye (3), characterized in that the first deflecting element (21) and/or the second deflecting element (23) are adjustably mounted on the adjusting element (6) (page 3, lines 2-3).

Regarding claim 6, Hanemann et al. discloses, in figures 1 and 2, an ophthalmic refractometer (figure 1) for objective determination of the refractive power of an eye (3), characterized in that the first deflecting element (21) and/or the second deflecting element (23) are mounted on the adjusting unit (6) with a mutual offset (suggested by the arrows in figure 2), so the length of the beam path in the optometer system (25) between the test mark (2) and the eye (3) corresponds exactly to the length of the beam path in the observation system (24) between the eye (3) and the digital unit (5) but does not specifically disclose a digital recording unit. Snook discloses, in figure 8, discloses a digital recording device (4) (col. 8, lines 15-16 and

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27-33). Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the device of Hanemann et al. with the digital recorder of Snook for the purpose of recording the image to further investigate the area of the eye (col. 8, lines 15-16 and 27-33).

Regarding claim 7, Hanemann et al. discloses, in figures 1 and 2, an ophthalmic refractometer (figure 1) for objective determination of the refractive power of an eye (3), comprising an adjusting unit (6) but does not specifically disclose wherein the adjusting unit can be adjusted using a servomotor. Hanemann et al. disclose that the adjusting unit (6) can be adjusting by a knob (5) (page 4, lines 9-10) but does not specifically disclose a servomotor. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention to include a servomotor instead of an adjustable knob for the purpose of precise calculations and measurements.

Regarding claim 8, Hanemann et al. discloses, in figures 1 and 2, an ophthalmic refractometer (figure 1) for objective determination of the refractive power of an eye (3), characterized in that the position of the adjusting unit (6) can be detected with a sensor (7), whereby a zero position of the adjusting unit (6) defines the reference position of the ophthalmic refractometer (figure 1), and the position of the adjusting unit (6) measured by the sensor (7) is relayed to an analyzer unit (27 and 28), where it can be analyzed as a current setting of the ophthalmic refractometer (figure 1) in relation to the reference position (page 4, lines 9-22).

Regarding claim 9, Hanemann et al. discloses, in figures 1 and 2, an ophthalmic refractometer (figure 1) for objective determination of the refractive power of an eye (3), characterized in that the position of the adjusting unit (6) can be detected by analysis of the

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position of the adjusting knob (5) (page 4, lines 9-10) but does not specifically disclose a servomotor. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention to include a servomotor instead of an adjustable knob for the purpose of precise calculations and measurements.

Regarding claim 10, Hanemann et al. discloses, in figures 1 and 2, an ophthalmic refractometer (figure 1) for objective determination of the refractive power of an eye (3), characterized in that the position of the adjusting unit (6) can be detected by analysis of the position of the adjusting knob (5) in equidistant increments (page 4, lines 9-10) but does not specifically disclose a servomotor. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention to include a servomotor instead of an adjustable knob for the purpose of precise calculations and measurements.

Regarding claim 12, Hanemann et al. discloses, in figures 1 and 2, an ophthalmic refractometer (figure 1) for objective determination of the refractive power of an eye (3), characterized in that the test mark (2) has a plurality of light fields (visible) and dark fields (covered) arranged in alternation (page 4, lines 9-22).

Regarding claim 13, Hanemann et al. discloses, in figures 1 and 2, an ophthalmic refractometer (figure 1) for objective determination of the refractive power of an eye (3), characterized in that an LED lighting device (18) for illuminating the test mark (2) is provided on the optometer system (25) (page 3, lines 19-20).

Regarding claim 16, Hanemann et al. discloses, in figures 1 and 2, an ophthalmic refractometer (figure 1) for objective determination of the refractive power of an eye (3),

characterized in that a device (figure 1) for applying a fixation mark to the eye (3) is provided (page 3, lines 25-27).

Regarding claim 17, Hanemann et al. discloses, in figures 1 and 2, an ophthalmic refractometer (figure 1) for objective determination of the refractive power of an eye (3), characterized in that a device (figure 1) for direct observation of the eye (3) by a person performing the test is provided (figure 1).

Regarding claim 18, Hanemann et al. discloses, in figures 1 and 2, an ophthalmic refractometer (figure 1) for objective determination of the refractive power of an eye (3), characterized in that a fixation light is provided for fixation of the eye (3) in a position in which the fundus (2") of the eye, in particular the nerve fiber head, can be observed with the observation system (page 3, lines 22-24) but does not specifically disclose a digital recording unit. Snook discloses, in figure 8, discloses a digital recording device (4) (col. 8, lines 15-16 and 27-33). Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the device of Hanemann et al. with the digital recorder of Snook for the purpose of recording the image to further investigate the area of the eye (col. 8, lines 15-16 and 27-33).

Allowable Subject Matter

6. Claims 19-22 are allowed.
7. Claims 11, 14, and 15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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8. The prior art taken either singularly or in combination fails to anticipate or fairly suggest the limitations of the independent claim(s), in such a manner that a rejection under 35 U.S.C. 102 or 103 would be proper. The prior art fails to teach a combination of all the claimed features as presented in claim(s) 11, 14, and 19, wherein the claimed invention comprises, in claim 11, wherein a contour image having midpoint symmetry, where a plurality of contour transitions extend outward from the midpoint, is used as the test mark; in claim 14, wherein the lenses are mounted on a common carrier element so that the lenses are arranged in the area of the part of the beam resembling a trombone slide; and in claim 19, wherein the contour sharpness evaluations of the image data records are analyzed in an analyzer unit to ascertain the settings at which relative maximum values for the contour sharpness evaluation are obtained and a refractive power parameter is determined in the analyzer unit from the difference between the reference setting and the settings at which there are relative maximum values for the contour sharpness evaluation, as claimed.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brandi N. Thomas whose telephone number is 571-272-2341. The examiner can normally be reached on Monday - Thursday from 6-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Mack can be reached on 571-272-2333. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Brandi N Thomas
Examiner
Art Unit 2873

BNT

BNT

Aref
ALICIA M. HARRINGTON
PRIMARY EXAMINER